

*Sub G1 cont.*

38. (amended) A replication-defective recombinant adenovirus, wherein the [virus] genome of said adenovirus contains at least two lethal deletions, two lethal mutations, or one lethal deletion and one lethal mutation in the E1 and E4 early gene regions, wherein an essential region of the E4 early gene region is deleted or mutated, so that the recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 adenoviral early regions, and wherein said recombinant adenovirus genome additionally contains a transgene [that replaces any one of said deletions].

*f 1*

39. (amended) A packaging cell line derived from a 293 cell that supports the growth of a replication defective recombinant adenovirus that carries at least a lethal deletion in each of [two lethal deletions of] adenovirus E1 and E4 early gene regions, so that the recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 adenoviral early <sup>gene</sup> regions, comprising a cell line that supplies the function of the E1 early <sup>gene</sup> region and the E4 early <sup>gene</sup> region wherein nucleotide sequences encoding the E1 and E4 early <sup>gene</sup> regions <sup>is are</sup> operably linked to an inducible promoter.

*I*

*Sub G2*

46. (amended) A recombinant adenoviral vector, wherein said vector comprises at least a lethal deletion or mutation in two gene regions [two lethal deletions, two lethal mutations or one lethal deletion or one lethal mutation] selected from the group consisting of E1, E2A, E4 early gene regions, viral structural genes, and additionally comprises a

transgene [that replaces any one of said deletions] so that when rescued the resulting recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 adenoviral early regions.

*Sub 62*  
*7*  
*cont.*

47. (amended) A recombinant adenoviral vector comprising at least a lethal deletion in each of adenovirus [two lethal deletions in the] E1 and E4 early gene regions, and a transgene [that replaces any one of said deletions] so that when rescued the resulting recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 early regions.

*F2*

48. (amended) A packaging cell line derived from a 293-  
cell that supplies the function of the E2A and E4 early <sup>gene</sup> regions wherein the nucleotide sequences encoding the E2A or the E4 <sup>and</sup> <sub>gene</sub> early <sup>gene</sup> regions are operably linked to an inducible promoter and that supports the growth of a mutant adenovirus defective in replication, wherein said adenovirus comprises at least a lethal deletion or mutation in two gene regions [two lethal deletions, at least two lethal mutations, or at least one lethal mutation and one lethal deletion] selected from the group consisting of E1, <sup>and</sup> E2A, <sub>A</sub> E4 early gene regions; viral structural genes, and so that when rescued the resulting recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 early <sup>gene</sup> regions.

49. (amended) A packaging cell line derived from a 293 cell that supplies the function of the E2A and E4 early region

wherein the nucleotide sequences encoding the E2A or the E4 early region are operably linked to an inducible promoter and that supports the growth of a recombinant adenoviral vector comprising a transgene, wherein said vector comprises at least a lethal deletion or mutation in two gene regions [two lethal deletions, two lethal mutations or one lethal deletion and one lethal mutation] selected from the group consisting of E1, E2A, E4 early gene regions, viral structural genes, so that when rescued the resulting recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 early regions.

*f2*  
50. (amended) A packaging cell line derived from a 293 cell that supplies the function of the E4 early region wherein the nucleotide sequences encoding the E4 early region are operably linked to an inducible promoter and that supports the growth of an adenoviral vector, wherein said vector comprises a lethal deletion or mutation in each of the [at least two deletions selected from the group consisting of] E1 and E4 early gene regions of said adenoviral vector and a transgene [that replaces any one of said deletions] so that when rescued the resulting recombinant adenovirus requires for replication complementation of genes of both the E1 and E4 early regions.

REMARKS

Attorneys for Applicant note with appreciation that the Examiner has indicated Claims 40-45 are in condition for allowance.